

Applic. No. 10/633,995

Amdt. dated January 9, 2006

Reply to Office action of December 7, 2005

Claim Amendments

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A sheet-processing machine, comprising:

a revolving sheet holding device for aiding in transporting sheets to be processed, said revolving sheet holding device including a suction bar extending transversely to a sheet transport direction and having suction elements disposed thereon and two revolving endless flexible drives holding ends of said suction bar;

a device for producing suction air or air blast, including:

a movable air delivery element accommodated on said revolving sheet holding device, said air delivery element being integrated in said suction bar; and

an actuating element cooperatively engaging with said air delivery element for driving said air delivery element,

Applic. No. 10/633,995

Amdt. dated January 9, 2006

Reply to Office action of December 7, 2005

said actuating element being one of fixed to a machine frame and movable relative to said sheet holding device.

Claims 2 and 3 (cancelled).

Claim 4 (currently amended): The sheet-processing machine according to claim [[2]] 1, wherein a multiplicity of said suction elements are mounted on said suction bar at a spaced distance from one another and serve for attracting the sheets at a trailing edge thereof by suction.

Claim 5 (currently amended): The sheet-processing machine according to claim 4, wherein said suction bar is formed with a longitudinally extending connecting line through which suction air is applicable by said air delivery element jointly to said multiplicity of suction elements.

Claim 6 (currently amended): ~~The sheet processing machine according to claim 2, which further comprises~~

A sheet-processing machine, comprising:

a revolving sheet holding device for aiding in transporting sheets to be processed, said revolving sheet holding device including a suction bar extending transversely to a sheet

Applic. No. 10/633,995

Amdt. dated January 9, 2006

Reply to Office action of December 7, 2005

transport direction and having suction elements disposed  
thereon and two revolving endless flexible drives holding ends  
of said suction bar;

a device for producing suction air or air blast, including:

a movable air delivery element accommodated on said  
revolving sheet holding device;

an actuating element cooperatively engaging with said air  
delivery element for driving said air delivery element,  
said actuating element being one of fixed to a machine  
frame and movable relative to said sheet holding device;  
and

at least one further air delivery element accommodated on  
said suction bar for acting on at least one further  
suction element, said at least one further air delivery  
element being driven in common by said actuating element.

Claim 7 (currently amended): ~~The sheet-processing machine  
according to claim 1, wherein~~

A sheet-processing machine, comprising:

Applic. No. 10/633,995

Amdt. dated January 9, 2006

Reply to Office action of December 7, 2005

a revolving sheet holding device for aiding in transporting  
sheets to be processed;

a device for producing suction air or air blast, including:

a movable air delivery element accommodated on said  
revolving sheet holding device;

an actuating element cooperatively engaging with said air  
delivery element for driving said air delivery element,  
said actuating element being one of fixed to a machine  
frame and movable relative to said sheet holding device;  
and

said movable air delivery element ~~includes~~ including an  
impeller rotatable within a cylindrical pump housing of  
an oscillating pump, said impeller having a drive  
connection through a rotational drive shaft to a roller  
element rolling on a cam disk fixed to the machine frame  
and forming said actuating element.

Claim 8 (currently amended): The sheet-processing machine  
according to claim 6, wherein a plurality of movable impellers  
are accommodated on said suction bar ~~for driving said~~  
~~impellers and are driven~~ by a common drive shaft.

Applic. No. 10/633,995

Amdt. dated January 9, 2006

Reply to Office action of December 7, 2005

Claim 9 (withdrawn): The sheet-processing machine according to claim 1, wherein said movable air delivery element includes a piston to be displaced within a cylindrical pump housing of a piston pump, said piston being reciprocated by a piston rod, said piston rod having one end to be guided along an axial cam track fixed to the machine frame and forming said actuating element, for producing an axial movement of said piston rod.

Claim 10 (withdrawn): The sheet-processing machine according to claim 9, which further comprises a roller for supporting said one end of said piston rod on said cam track, said piston being acted upon by a resilient force for urging said piston in a direction towards said axial cam track.

Claim 11 (withdrawn): The sheet-processing machine according to claim 6, wherein a plurality of movable pistons are accommodated on said suction bar and are to be reciprocated by a common piston rod.

Claim 12 (withdrawn): The sheet-processing machine according to claim 1, wherein said movable air delivery element includes a suction head having a cylindrical inner bore and is supported by a resilient element for moving on a piston element accommodated in said cylindrical inner bore and

Applic. No. 10/633,995

Amdt. dated January 9, 2006

Reply to Office action of December 7, 2005

connected to said sheet holding device, said suction head being movable counter to action of said resilient element by a sheet supporting face forming said actuating element and belonging to a rotating sheet transport device, for producing the suction air.

Claim 13 (withdrawn): The sheet-processing machine according to claim 12, wherein said cylindrical inner bore has a flow connection through a venting valve to the surroundings, for enabling air contained in said cylindrical inner bore to escape from said inner bore when said suction head is moved in a direction towards said piston element.

Claim 14 (withdrawn): The sheet-processing machine according to claim 1, wherein said movable air delivery element includes a bellows having one end supported on said sheet holding device and another end with a suction face for making contact with a respective sheet, said suction face being urged, counter to inherent stiffness of said bellows, in a direction towards said sheet holding device by a sheet supporting face forming said actuating element and belonging to a rotating sheet transport device, for producing the suction air.

Claim 15 (withdrawn): The sheet-processing machine according to claim 14, wherein said bellows has an interior space

Applic. No. 10/633,995

Amdt. dated January 9, 2006

Reply to Office action of December 7, 2005

connected flowwise to the surroundings through a venting valve for enabling air contained in said interior space to escape when said bellows is compressed by said sheet supporting face.

Claim 16 (withdrawn-currently amended): In a sheet-processing machine having a revolving sheet holding device for aiding in transporting sheets to be processed, a device for producing suction air or air blast, comprising:

a movable air delivery element accommodated on the revolving sheet holding device; and

an actuating element cooperatively engaging with said air delivery element for driving said air delivery element, said actuating element being one of fixed to a machine frame and movable relative to the sheet holding device; and

said movable air delivery element including an impeller rotatable within a cylindrical pump housing of an oscillating pump, said impeller having a drive connection through a rotational drive shaft to a roller element rolling on a cam disk fixed to the machine frame and forming said actuating element.